

SANTOPRENE[®] 203-40

A hard, colorable, versatile thermoplastic vulcanizate (TPV) in the thermoplastic elastomer (TPE) family. This material combines good physical properties and chemical resistance for use in a wide range of applications. This grade of Santoprene® TPV is shear-dependent and can be processed on conventional thermoplastics equipment for injection molding, extrusion, blow molding, thermoforming or vacuum forming. It is polyolefin based and recyclable within the manufacturing stream.

Key Features

· UL listed: file #QMFZ2.E80017, Plastics - Component; file #QMFZ8.E80017, Plastics Certified For Canada - Component.

· Excellent ozone resistance.

Typical mechanical properties

Stress at 100% elongation	9	MPa	ISO 527-1/-2 or ISO 37
Stress at break	20.7	MPa	ISO 527-1/-2 or ISO 37
Elongation at break	610	%	ISO 527-1/-2 or ISO 37
Brittleness Temperature		°C	ASTM D 746
Low temperature brittleness		°C	ISO 812
Shore D hardness, 15s	41		ISO 48-4 / ISO 868
Shore D hardness, 168h at 150°C	4		ISO 48-4 / ISO 868
Compression set at 70°C, 24h	54		ISO 815
Compression Set, 125°C, 70h	61		ISO 815
Tear strength, normal	64	kN/m	ISO 34-1
Thermal properties			
RTI, electrical, 1.5mm	85	°C	UL 746B
RTI, strength, 1.5mm	85	°C	UL 746B
Specific Application Suitability			
Detergent resistance	f3		UL 749
Detergent resistance	f4		UL 2157
Flammability			
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3		UL 94
UL recognition	ves		UL 94
Hot Wire Ignition, 1mm	PLC 4	S	UL 746A
Hot Wire Ignition, 1.5mm	PLC 3		UL 746A
Hot Wire Ignition, 3mm	PLC 2		UL 746A
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Electrical properties			
Comparative tracking index	PLC 0	PLC	UL 746A
Arc Resistance Performance Level Category	PLC 5		UL 746B
Electric Strength, Short Time, 2mm		kV/mm	ASTM D 149
High Amperage Arc Ignition Category, 1.5 mm	PLC 0		UL 746A
High Voltage Arc Tracking Rate	PLC 1	mm/min	UL 746A
Other properties			
Density	950	kg/m³	ISO 1183
Injection			
Drying Temperature	82	°C	
Drying Time, Dehumidified Dryer	3	h	
Processing Moisture Content	0.08	%	
Max. regrind level	20		
Max. mould temperature	10 - 52		
Vent depth		μm	
Back pressure	0.345 - 0.689	MPa	
Injection speed	fast		
Extrusion			
Drying Temperature	82	°C	
Drying Time, Dehumidified Dryer	3	h	
Melt Temperature Range	210	°C	
Processing Texts			

Processing Notes

Desiccant drying for 3 hours at 80° C (180° F) is recommended. Santoprene® TPV has a wide temperature processing window from 175 to 230°C (350 to 450° F) and is incompatible with acetal and PVC.

Other Approvals

Other Approvals	OEM	Specification	Additional Information
	Stellantis - Chrysler	MS-AR-100 FGN	

Printed: 2023-08-08

Revised: 2023-06-27 Source: Celanese Materials Database

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